

BEREZIN, V.L.; BOBRITSKIY, N.V.; KHAKIM'YANOV, R.R.; AZEVICH, S.P.

Selecting the proper conditions for the elimination of corrosion damage to operational petroleum-products pipelines by the application of patches. Izv. vys. ucheb. zav.; neft' i gaz. 8 no.5:89-92 '65. (MIRA 18:7)

1. Ufimskiy neftyanoy institut.

BEREZIN, V.L.; BOBRITSKIY, N.V.; KHAKIM'YANOV, R.R.; AZEVICH, S.P.

Selecting the technology of the sealing of cavities in
petroleum pipelines in case of overhauling. Izv. vys.
ucheb. zav.; neft' i gaz 7 no.11:71-75 '64. (MIRA 18:11)

1. Ufinskiy neftyanoy institut.

АЗАТОВ, А.

MOGILEVTSOVA, M.S., kandidat sel'skokhozyaystvennykh nauk; ZHUKOVA, V.K.,
kandidat tekhnicheskikh nauk; ABAYEV, K.G.; YUPEROVA, A.I.

Harvesting spring wheat in separate stages. Zemledelie 5 no.8:58-63
No. 157. (MLRA 10:9)

(Wheat--Harvesting)

КОМАНД, Л. И.

1. SHEYKO, A. N., ЕВЕНАЭГОН, Л. И.: КОМАДИН, Н. Т.

2. USSR(600)

4. Soap

7. Applying Bogod's method in the "novyi mylovar" Factory. Masl. Zhir. prom. 17, no. 3
1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

A Z I A M I, Z I

- 1016. *ბიძეები*, 3-4-4-3 ამბობს 1941; ტრ. თბილ. ზოგადი, ნ. 7, 1, 2, 1948.
- 1020. *ქალი*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1021. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1022. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1023. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1024. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1025. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1026. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1027. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1028. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1029. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1030. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1031. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1032. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1033. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1034. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1035. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1036. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1037. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1038. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1039. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1040. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1041. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1042. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1043. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1044. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1045. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1046. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1047. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1048. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1049. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.
- 1050. *ბიძეები*, *სიბერე*, *გრაფიკა*, ზაგ. 1938, 2212.

Dissertation for degree of Candidate Biological Sciences

Def. at Tbilisi State U.

AZHANIASHVILI, M. G.

Def. at
Tbilisi State U.

- 629. Уставный материал по истории и географии Грузии. 1957. 3-й изд. 296 с.
- 630. Вспомогательная литература по истории Грузии. 1958. 1-й изд. 142 с. (Изд. Тбилисского государственного университета. 1958. 70 с. ил.).
- 631. Физико-географическое описание Грузии. 1944. 142 с. (Изд. Тбилисского государственного университета. 1944. 142 с. ил.).
- 632. Географический атлас Грузии. 1948. 64 с. (Изд. ЦСН ССРСР).
- 633. Работы П. Н. Коспорова о географии Грузии. 1938. 70 с. ил. (Сочинения П. Н. Коспорова. 1938. 104 с.).
- 634. Атлас Грузии. 1947. 104 с. (Изд. ЦСН ССРСР).
- 635. Атлас Грузии. 1947. 104 с. (Изд. ЦСН ССРСР).
- 636. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 637. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 638. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 639. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 640. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 641. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 642. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 643. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 644. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 645. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 646. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 647. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 648. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 649. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 650. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 651. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 652. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 653. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 654. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 655. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 656. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 657. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 658. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 659. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 660. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 661. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 662. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 663. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 664. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 665. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 666. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 667. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 668. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 669. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).
- 670. Кавказская война. 1948. 104 с. (Изд. ЦСН ССРСР).

706
Dissemination for degree of
Candidate of Natural Sciences

GORDON, A. N.; AZHANOV, A. S.; DIYCOV, M. V. (3)

"Nouvelle determination de la temperature de congelation de l'or pur"

Report presented at the 6th Session of the Advisory Committee
on Thermometry to the International Committee on Weights and
Measures, Sevres, France, 25-27 Sep 62

Institut de Metrologie M. I. Mendeleev (U. R. S. S.)

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ACC NR: AT6024959

(N)

SOURCE CODE: UR/0000/65/000/000/0082/0089

AUTHOR: Azhasha, V. G.

56
B+1

ORG: none

TITLE: New achievements in deep-water diving ✓

SOURCE: AN SSSR, Okeanograficheskaya komissiya. Sektsiya podvodnykh issledovaniy. Razvitiye morskikh podvodnykh issledovaniy (Development of underwater marine research) Moscow, Izd-vo Nauka, 1965, 82-89

TOPIC TAGS: decompression sickness, gas analysis

ABSTRACT: This article discusses the effects on man of deep-sea diving, using as an example the studies of Hans Keller who thoroughly studied the rate of release of various gases, mainly nitrogen and helium, from various tissues of the body under various pressures. Keller, using an electronic computer, calculated the curve of the dependence of the release of gases on depth and rate of ascent. For ascent from a depth of 300 m Keller calculated 250,000 changes in the composition of the respiratory gas mixture. Thus, new, more effective tables of decompression were compiled. Furthermore, Keller used all the well-known possibilities to reduce the entrance of any gas whatsoever into the organism. Before submergence, Keller breathed pure

Card 1/2

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oxygen for two hours which led to an appreciable decrease in the quantity of nitrogen dissolved in the human body at atmospheric pressure. The author concludes that the work of Keller is still in the experimental stage and that it is an outstanding scientific achievement which will be of great help to professional divers and deep-water researchers. Orig. art. has: 1 figure.

SUB CODE: 06/ SUBM DATE: 06Dec65

alum
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ACC NR: AT6036560

(series 1), 460C (series 2), and for 30 min to air temperature of 480C (series 3). Relative humidity in the thermo-chamber was kept between 15% and 25%, and velocity of air movement between 0.1 and 0.2 m/sec.

Work capacity was evaluated by means of correction tablet tests [A. A. Genkin et al. (1963)], grip strength dynamometry, and a graphic test [Frukuda (1959)]. Visual analyzer function was studied by determining the electrical excitation threshold of the eye, flicker fusion frequency, and the information transmission capacity of the visual analyzer [F. P. Kosmolinskiy, Ye. A. Derevyanko (1962), A. A. Genkin et al. (1963)]; vestibular analyzer function was studied by determining the duration of postrotational nystagmus and the counterrotation illusion, and also the area of displacement while walking in place with eyes closed [Frukuda (1959)]. In addition, pulse and respiration frequencies, electrocardiograms, blood pressure, and body and skin temperature at twelve points were recorded during all experiments, and some of the components of heat exchange were calculated. Not counting the control group (6 men), experiments were conducted on 39 subjects, 14 in series 1, 13 in series 2, and 11 in series 3. It was established that even a

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60 min exposure to an air temperature of 44°C decreased work capacity (error increase of 2.4% on the correction test, 4.8% on the graphic test, and so forth); the information transmission capacity of the visual analyzer decreased by 13.5%; decreases were also seen in the electrical excitation threshold of the eye and in the weight of the subjects (by 200 g); increases were seen in body temperature (by 0.3°C), the frequency of cardiac contractions (by 14/min), and so forth. In series 2 and 3, human functional capacity showed a sharp drop, which was characterized by more pronounced shifts in a number of investigated functions. Thus, at +60°C the number of errors increased by 15.6%; at +80°C, by 58%; and so forth.

The above data show that even a single hour's exposure of an unclad human to a temperature of +40°C affects work capacity; this must be taken into account in organizing industrial medical support and in devising measures to improve work conditions and work schedules in hot climates. [W.A. No. 22; ATD Report 66-116]

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Card 3/3

ZLOBIN, Anatoliy; SMIRNOV-CHEKREZOV, A.; AZHAYEV, Vasilii, red.; VASILEVSKIY, Vitaliy, red.; VERSHIGORA, Petr, red.; DAKIN, Danil, red.; PROMYSLOV, V.F., red.; KORENEV, G., red.isd-va; YAKOVLEVA, Ye., tekhn.red.

[Twenty-three stories on builders] 23 rasskaza o stroitelakh.
Moskva, Mosk.rabochii, 1958. 386 p. (MIRA 12:11)
(Moscow--Construction workers)

20513

S/149/62/000/002/007/008
A006/A101

21. 4 200

AUTHORS: Davankov, A. B., Laufer, V. M., Azhazha, E. G., Gordiyevskiy, A. V., Kiryushov, V. N.

TITLE: Experiences in extracting uranium and other elements from Atlantic Ocean water

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya Metallurgiya, no. 2, 1962, 118-123

TEXT: Experiments of extracting various elements from Atlantic Ocean water were carried out in 1959, during the sixth Atlantic expedition of the Marine Hydrophysical Institute of AS SSSR. Water from various parts of the Atlantic was filtered through an absorption column mounted on board the expedition vessel. This vinylplastic column, 1,600 mm high with 63 mm internal diameter, was filled with 3.5 kg granulated H-O anion-exchange resin in Cl form of 64% moisture. An amount of 59,189 liters of water was filtered through the column at an average rate of 40 l/hour. The qualitative and quantitative determination of various elements in the resin was carried out by radiometric β -radiation, luminescent and polarographical analyses. The amount of uranium

Card 1/2

DAVANKOV, A.B.; LAUFER, V.M.; AZHAZHA, E.G.; GORDIYEVSKIY, A.V.; KIRYUSHOV,
V.N.

Recovery of uranium and other elements from the water of the
Atlantic Ocean. Izv. vys. ucheb. zav.; tsvet. met. 5 no.2:118-
123 '62. (MIRA 15:3)

1. Moskovskiy khimiko-tekhnologicheskii institut, kafedra
tekhnologii plastmass.
(Atlantic Ocean--Uranium) (Marine resources)

POPOV, N.I.; AZHAZHA, E.G.; KOSOUROV, G.I.; YUZEFOVICH, A.A.

Strontium-90 in surface waters of the Atlantic Ocean. *Okeanologia*
2 no.5:845-848 '62. (MIRA 15:11)

1. Morskoy gidrofizicheskiy institut AN SSSR.
(Atlantic Ocean--Strontium)

AZHAZHA, E.G.; CHULKOV, P.M.

Strontium-90 in the surface waters of the Atlantic Ocean in the first half of 1961. Okeanologiya 4. no.1:68-73 '64. (MIRA 17:4)

1. Morskoy gidrofizicheskiy institut AN UkrSSR.

AZHAZHA, V., inzh.; BUSLOW, V., inzh.

Inspecting the state of concrete in the underwater zone by
the acoustic pulse method. Mor. flot 25 no.10:39-40 0 '65.
(MIRA 18:11)

AZHARHA, V. G., O. N. KISELEV and K. I. YUFANOV

"The Application of Hydroacoustic Equipment for Fishing."

report presented at the All-Union Conference on Biological Foundations of Ocean Fishing, 11-16 April 1958, by Ichthyological Committee of AS USSR, VNIRO, and Inst. Oceanography, AS USSR.

(Vest. AN SSSR, 1958, No. 7, pp. 131-133)

AZHAZHA, V.G., inzh.

Use of hydroacoustic apparatus in herring fishing with variable-
depth trawls. Trudy VNIRO 41:5-23 1959. (MIRA 13:8)
(Sonar in fishing) (Herring fisheries)
(Trawls and trawling)

AZHAZHA, Vladimir Georgiyevich; SHISHKOVA, Yekaterina Vasil'yevna;
MOROZOVA, I.I., red.; SOKOLOVA, I.A., tekhn.red.

[Fish location by the use of hydroacoustic apparatus] Poisk
ryby gidroakusticheskimi priborami. Moskva, Pishchepromizdat,
1960. 140 p. (MIRA 13:6)

(Sonar in fishing)

AZHAZHA, V.G.

Research submarine "Severianka." Btvl.Okean.kom. no.6:66-67 '60.
(MIRA 14:7)

(Severianka (Submarine boat))

AZHAZHA, V.G.; VALASHEK, Yu.R.; GRISHKOV, V.V.

Device for remote measurement of salinity, temperature and
pressure of sea water ("thermosalinometer-2"). Ryb. prom.
no. 4:3-33 '60.

(MIRA 15:9)

(Oceanographic instruments)

AZHAZHA, V.G.

Modern methods of locating herring by the use of hydroacoustic apparatus in the North Atlantic in fall and winter. Trudy sov. Ikht. kom. no.10:219-229 '60. (MIRA 13:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii-(VNIRC).
(Atlantic Ocean--Herring fisheries) (Sonar in fishing)

AZHAZHA, Vladimir Georgiyevich; PERVAKOV, I.L., red.; BELICHENKO, R.K.,
mladshiy red.; BURLAKA, N.P., tekhn. red.

["Severianka" leaves for the ocean] "Severianka" ukhodit v okean.
Moskva, Gos. izd-vo geogr. lit-ry, 1961. 111 p. (MIRA 14:8)
(Submarine boats) (Deep-sea sounding)

AZHAZHA, V.G.; MAMAYEVA, R.B.

Union of underwater explorers. Okeanologia 1 no.5:928-930 '61.

(Diving, Submarine--Congresses)

(MIRA 15:3)

AZHAZHA, V.G. (Moskva)

The blue curtain parts; scientific voyages of the "Severianka."
Priroda 50 no.7:81-87 J1 '61. (MIRA 14:6)
(Atlantic Ocean---Oceanographic research)
(Severianka (Submarine boat))

SOKOLOV, Oleg Aleksandrovich; AZHAZHA, Vladimir Georgiyevich;
ZHERDET'SKAYA, N.N., red.; MALEK, Z.N., tekhn. red.

[Submarine motion-picture photography] Podvodnaia kino-
s"emka. Moskva, Iskusstvo, 1962. 111 p. (MIRA 15:7)
(Motion-picture photography, Submarine)

MAMAYEVA, R.B., kand.geograf.nauk; AZHAZHA, V.G.

Recent developments in underwater research disclosed at the
Plenum of the Oceanographic Committee. Vest. AN SSSR 33
no.9:88-89 S '63. (MIRA 16:9)
(Oceanographic research)

AZHAZHA, Vladimir Georgiyevich; KOSAKOVSKAYA, N., red.

[Deep-sea divers] Gidronavty. Moskva, Izd-vo "Znanie,"
1964. 93 p. (MIRA 18:1)

1. Zamestitel' predsedatelya sektsii podvodnykh issledovateley okeanograficheskoy komissii AN SSSR (for Azhazha).

AZHAZHA, V.M.; GUMENYUK, V.S.; POPOV, B.Ye.

Expanding the use of the IQZ-10 high frequency oscillator.
Prib.i tekhn. eksp. no.1:102-103 Jan. '60. (MIRA 13:6)

1. Fiziko-tehnicheskii institut AN USSR.
(Oscillators, Electric)

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18.8200

1418.4016, 2807 1035

S/181/61/003/003/017/030
B102/B205

AUTHORS: Amonenko, V. M., Tikhinskiy, G. F., Finkel', V. A.,
Azhuzha, V. M., Shpagin, I. V.

TITLE: Plastic deformation of textured beryllium

PERIODICAL: Fizika tverdogo tela, v. 3, no. 3, 1961, 790-802

TEXT: Single crystals of beryllium show highly anisotropic mechanical properties on account of their hexagonal crystal structure. A study has now been made of the mechanical properties of high-purity beryllium foils. For this purpose, thin textured Be foils of high purity (99.987% without taking hydrogen into account) were prepared by condensation of beryllium vapor on molybdenum sheet in a vacuum of $1 \cdot 10^{-6}$ mm Hg. The rate of evaporation was $0.2 \text{ g/cm}^2 \cdot \text{hr}$, the condensation temperature was $300-320^\circ\text{C}$, and the temperature of heat treatment was 700°C for one hr. These conditions were the same for all specimens. The purity was checked by a determination of the resistivity ratio: $R_{4.20\text{K}}/R_{293\text{K}} = 9 \cdot 10^{-3} - 1.5 \cdot 10^{-2}$. The grain size varied from 8 to 15μ , the foils had a thickness of $170-300 \mu$, and the density was

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X

Plastic deformation ...

1.831 g/cm³. The texture was studied by X-ray analysis using a tube designed by B. Ya. Pines and V. S. Kogan. Two different textures (I and II) were studied. Texture I of the Be foil showed no relationship with that of the molybdenum backing which had been carbided. The X-ray diagrams showed no (002) line, i.e., an axisymmetric texture with the axis [001] (perpendicular to the surface of the foil) could be assumed. Texture II showed "interaction" of the condensate of hexagonal beryllium with the backing (body-centered cubic Mo) with the texture (100) [011]. On account of this "interaction", the basal plane (002) was orientated at an angle of 45° toward the surface of the foil, which resulted in a shift of the interference points. The plastic deformation (rate: 1% per min) was studied at 20-800°C. The temperature was measured by means of a Pt-PtRh thermocouple (accuracy: ±2°). The specimens had a size of 50 × 4 × (0.17-0.3) mm. Three kinds of specimens with different directions of the texture relative to the direction of expansion were studied. Type I: The basal plane coincided with the plane of the specimen. The temperature dependence of the breaking point σ_b of the longitudinal expansion δ and of the lateral contraction Ψ was measured (Fig. 4). The maximum value of σ_b at room tem-

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B017/B054

1.9600

AUTHORS: Azhazha, V. M. and Borushko, I. M.

TITLE: Vacuum Machine for Investigating Creep and Endurance

PERIODICAL: Zavodskaya laboratoriya, 1961, Vol. 27, No. 1, pp. 92-93

TEXT: A high-vacuum apparatus was developed to investigate endurance and creep of metals and alloys within a wide range of temperatures and stresses. The vacuum system consists of a working chamber, a high-vacuum diffusion pump, and an P84-20 (RVN-20) rough-vacuum pump. During investigations, pressure in the chamber is kept at $1 - 5 \cdot 10^{-5}$ mm Hg. Samples are heated in a molybdenum tube furnace (up to 1500°C). There are 2 figures. X

ASSOCIATION: Khar'kovskiy fiziko-tehnicheskii institut Akademii nauk USSR (Kharkov Institute of Physics and Technology, Academy of Sciences UkrSSR)

Card 1/1

Mechanical properties of high ...

S/180/62/000/001/014/014
E040/E135

30 mm in length and 6 mm in diameter. The specimens were annealed after polishing in order to remove the effects of cold-working. It was found that in tensile tests at 20 °C high-purity Ni behaves in the same manner as pure polycrystalline Al, i.e. after formation of one or several necks further deformation proceeds by slip. Impact strength was > 36 and > 34 kgm/cm² at 20 and -196 °C, respectively, compared with 18.9 kgm/cm² for commercial grade Ni. Specimens were not fractured but on those tested at -196 °C clearly visible cracks were observed. The room-temperature tensile strength was 34.0 kg/mm²; yield strength 6.7 kg/mm²; elongation 63%; and Brinell hardness 56 to 58 kg/mm². Because magnetic properties of ferromagnetic materials depend on the presence of impurities, especially gases, the ferromagnetic anomaly of ductility of high-purity nickel, which contains only a negligible quantity of gases, was expected to be indicated more clearly than in ordinary purity nickel. There are 3 figures and 2 tables.

Card 2/3

37382

S/020/62/143/006/011/024
B164/B101

18. 8200

AUTHORS: Gindin, I. A., Starodubov, Ya. D., and Azhazha, V. M.

TITLE: Increase of the creep resistance of nickel by prior deformation at 4.2°K

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 6, 1962, 1325-1327

TEXT: The effect of small deformations of nickel at 4.2°K on its creep resistance at higher temperatures was examined by tempering small specimens of high-purity nickel (99.994%) in vacuo at 800°C and then drawing them at 4.2°K, the rate of drawing being 0.03 mm/sec and the degree of deformation 1.7 or 3.5%, afterward establishing the creep curves under a constant stress of 2.8 kg/mm² in vacuo at 700°C. For comparison, tempered specimens which had been deformed at room temperature were used as standards. An increase in creep endurance from 40 to 106 hrs (after 3.5% deformation) and a 4.5-fold increase in creep strength were obtained. Specimens prestrained at 300°C gave much lower values amounting to 51.5 hrs and to a 1.37-fold increase, respectively.

Card 1/2

IVANTSOV, I.G., inzh.; AZHAZHA, V.M., inzh.; AMONENKO, V.H., kand.tekhn.nauk

Vacuum-smelted, heat-resistant, iron-base alloy castings.
Metalloved. i term. obr. met. no. 43-45 JI '62. (MIRA 15:6)

1. Fiziko-tehnicheskii institut AN USSR.
(Iron alloys--Thermal properties)
(Vacuum metallurgy)

ACCESSION NR: AT3007907 S/2957/63/000/000/0061/0064

AUTHOR: Amonenko, V. M.; Belgov, I. S.; Zeydlits, M. P.; Ashazha, V. M.

TITLE: Effect of vacuum melting on properties of EI846, EI852, EI847, and EI437B steels

SOURCE: Primeneniye vakuuma v metallurgii; trudy* Tretyego soveshchaniya po primeneniyu vakuuma v metallurgii. Moscow, 1963, 61-64.

TOPIC TAGS: vacuum melting, vacuum induction melting, EI846 steel, EI847 steel, EI852 steel, EI437B alloy, EI846 steel vacuum melting, EI847 steel vacuum melting, EI852 steel vacuum melting, EI437B alloy, vacuum melting, mechanical property, gas content, nonmetallic inclusion content, ductility, hardness, tensile strength, yield strength, notch toughness

ABSTRACT: Small, 20-25-kg, heats of EI846 [apparently an austenitic chromium nickel steel containing 0.02-0.03% C and 0.1-0.8% B], EI847 [0.5-0.10% C, 14.0-17.0% Cr, 14.0-16.0% Ni, 0.45-0.85% Nb,

Card 1/4

ACCESSION NR: AT3007907

2.5—3.5% Mo], and EI852 [0.50% max C, 1.4—2.1% Si, 12.0—14.0% Cr, 1.0% Ni, 1.2—2.0% Mo] steels and EI437B nickel-base alloy [Nimonic 80A] were melted in a laboratory induction furnace under a vacuum of 0.00005—0.0001 mm Hg. In all four materials vacuum melting greatly reduced the gas content: oxygen, to 0.0007—0.002%; hydrogen, to 0.0001—0.0003%; and nitrogen, to 0.001—0.003%, that is, by 80—90% compared with conventionally melted steels. The size and content of nonmetallic inclusions was also considerably reduced. This resulted in a significant improvement of ductility, especially at 500—800C (see Fig. 1 of the Enclosure). Tensile and yield strengths were not significantly affected by vacuum melting; hardness dropped by 10—20% compared with conventional melting. The beneficial effect of vacuum melting was especially pronounced in EI846 steel. Owing to low carbon and high boron contents, it is difficult to obtain steel of satisfactory quality by conventional arc or induction melting. Satisfactory ductility can be obtained only by keeping the boron content close to the lower limit. In vacuum-melted steel, however, ductility drops with increased boron content, but still remains satisfactory; at 0.8% boron the elongation at 20, 500, and 800C amounted to 30, 18, and 56%. Increase of boron content to

Card 2/4

ACCESSION NR: AT3007907

1.15% did not produce any significant drop of elongation. Orig.
art. has: 4 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 12 Jul 63

ENCL: 01

SUB CODE: ML

NO REF SOV: 002

OTHER: 002

Card 3/4

ACCESSION NR: AT3007907

ENCLOSURE: 01

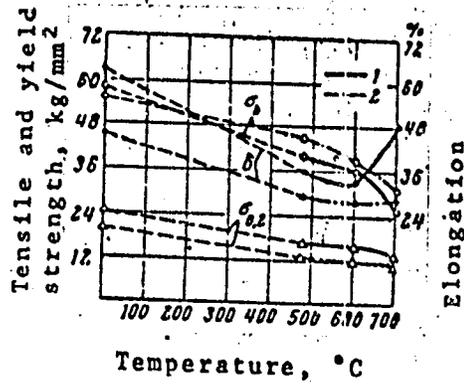


Fig. 1. Mechanical properties of EI846 steel with 0.1% boron

Melted: 1 - in vacuum; 2 - in air.
 σ_b - tensile strength; $\sigma_{0.2}$ - yield strength; δ - elongation.

Card 4/4

AZHARHA, V.M.; GINDIN, I.A.; STARODUBOV, Ya.D.

Comparing the effect of prestressing at 4.2 and 300° K on the creep characteristics of nickel at 700°C. Fiz.met. i metalloved. 15 no.1:119-124 Ja '63. (MIRA 16:2)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.
(Nickel—Cold working) (Creep of nickel)

I. 1(109-6)

EPF(c)/EPF(n)-2/EPF(q)/EPF(m)/PDS AFFTC/ASD/SSD

Pu-4 WW/JD/IJH(C)

ACCESSION NR: AP3001699

S/0126/63/015/005/0729/0735 14

AUTHOR: Jzhazha, V. M.; Gindin, I. A.; Starodubov, Ya. D.; Shapoval, B. I. 71

TITLE: Effect of low-temperature prestrain on the creep and internal friction of copper 16 14

SOURCE: Fizika metallov i metallovedeniye, v. 15, no. 5, 1963, 729-735

TOPIC TAGS: commercial-grade copper, subzero-temperature prestraining, annealing, creep characteristics, internal friction, microstructure changes

ABSTRACT: The effect of low-temperature prestrain on the creep, microstructure, and internal friction of commercial-grade copper was studied. Test specimens annealed in a high vacuum for 2 hr at 850C were prestretched 2.5, 5.0, 7.5, 12.5, or 35% at a constant rate of 0.03 mm/sec at temperatures of 300 or 4.2K. Specimens prestretched at 4.2K were annealed at room temperature for 100 hr. Both groups of specimens were then subjected to short-time creep tests in a vacuum of 0.02 mm Hg at 500C under a stress of 2 kg/mm sup 2. The tests showed that a prestrain of up to 7.5% at room temperature or subzero temperature sharply decreased the rates of the first and second creep stages. The second-stage creep rate, for instance, decreased from 0.95%/hr for annealed specimens, to 0.09 and 0.05%/hr for specimens
Card 1/2

L 10109-63
ACCESSION NR: APJ001699

3

prestrained 7.5% at 300 and 4.2K. The rupture strength of approximately 6.5 hr for annealed specimens increased to approximately 10.0 and 12.3 hr for the specimens prestretched 7.5% at 300 and 4.2K. The purer the metal and the coarser the grain, the higher the effect of prestraining. Oxygen-free copper prestretched 7.5% at 300 or 4.2K and tested under the above conditions had a creep rate of 0.02 or 0.01%/hr and a rupture life of 19.5 or 24 hr. The 10% elongation and reduction of area of the annealed specimen decreased to 4% for the specimens prestrained 7.5% at 4.2 and 300K. Prestrain at 4.2K strengthens grain boundaries and adjacent grain zones and promotes formation of a substructure. This sharply reduces the number of microcracks formed along grain boundaries during creep and inhibits intergranular failure of the metal. Low-temperature prestrain reduces internal friction in copper and significantly increases the temperature at which it begins to rise sharply, e.g., from approximately 100C for annealed specimens to 320 and 470C for specimens prestrained at 300 and 4.2K. Orig. art. has: 1 table and 8 figures.

ASSOCIATION: Fiziko-tehnicheskij institut AN USSR (Physicotechnical Institute, AN USSR)

SUBMITTED: 11Nov62

DATE ACQ: 11Jul63

ENCL: 00

SUP CODE: 00

NO REF SOV: 016

OTHER: 003

Card 2/24

AMONENKO, V.M.; AZHAZHA, V.M.; IVANOV, V.Ye.; TIKHINSKIY, G.F.;
PINKEL', V.A.

Deformation and fracture of rolled beryllium of different
purity. Atom.energ. 16 no. 5:426-432 My '64. (MIRA 17:5)

L 7037-65 E/W(m)/E/WP(k)/E/WP(q)/E/WP(b) Pf-4 AFWL/ASD(f)/RAEM(t) JI/HW/JG

ACCESSION NO: AP403627

S/0089/64/016/005/0425/0432

AUTHOR: Amnenko, V. M.; Anbazha, V. M.; Ivanov, V. Y.; Tikhinskiy, G. P.; Pinkel', V. A. B

TITLE: Deformation and failure of rolled beryllium of different purity

SOURCE: Atomsnaya energiya, v. 16, no. 5, 1964, 426-432

TOPIC TAGS: beryllium, beryllium deformation, beryllium failure, beryllium strength, commercial beryllium, high purity beryllium, precipitation hardening

ABSTRACT: The authors investigated the plastic deformation and the type of failure in 99.0 and 99.6% pure beryllium strip at temperatures varying from 20 to 800 C. The specimens were prepared by vacuum distillation and magnesium reduction followed by rolling in a vacuum mill at a residual pressure of 10^{-5} Hg and approximately 750 C. Total reduction of the specimens was 85 to 90%. Purity control was carried out by residual resistivity measurements. The authors found that the basic mechanism of plastic deformation was a slip in the (1010) $11\bar{2}0$ system. Failure occurred either along cleavage planes at low temperatures or along grain boundaries at elevated temperatures. Impurities considerably af-

Card 1/2

L 7037-65

ACCESSION NR: AP4036527

fects the magnitude of plastic deformation as well as the character of failure. The yield point of the high purity specimens was much lower within the investigated temperature range than that of 99.0% pure metal. Commercially pure metal was actually found to be a precipitation-hardened alloy. The tendency towards lower plasticity in polycrystalline beryllium was also established by other investigators as the amount of impurities was increased. The authors emphasize that they have not experimented with maximum-purity specimens and that it was possible to produce 99.9% pure beryllium having an electric resistivity of 4×10^{-5} . However, the properties of this highly pure beryllium remain to be studied. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 29Dec65

ENCL: 00

SUB CODE: NA1

NO REF SOV: 009

OTHER: 008

Card 2/2

L 39752-65 EWP(e)/EWT(m)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) Pad IJP(c)
ACCESSION NR: AP4048771 JD/HW S/O: 26/84/018/004/0553/0557

AUTHOR: Bolgov, I. S.; Azhazha, V. M.; Amonenko, V. M.; Zeydlits, M. P.

TITLE: Development of etching patterns in nickel by thermal etching in vacuum

SOURCE: Fizika metallov i metallovedeniye, v. 18, no. 4, 1964, 553-557

TOPIC TAGS: thermal vacuum etching, nickel etching, etching pattern

ABSTRACT: A thermal etching method in vacuum was developed for nickel and its alloys with boron. It was found that boron addition facilitated the appearance of etching patterns, increased their density, and reduced the grain size. The temperature range between 700 and 1200 C was investigated, and the optimal temperatures were found to be at about 1000. The electropolished samples showed indentations most of which had a flat bottom indicating the absence of dislocations in them. Similar treatment was applied also to other metals (Co, Cr, U). The results indicate the effectiveness of the thermal etching in vacuum. Orig. art. has: 2 figures.

Card 1/2

L 39752-65

ACCESSION NR: AP4049771

ASSOCIATION: Khar'kovskiy fiziko-tekhnicheskii institut (Khar'kov Physical
Technical Institute)

SUBMITTED: 24Jun83

ENCL: 00

SUB CODE: MM

NR REF SCV: 000

OTHER: 010

ai
Card 2/2

L 43856-65

EWI(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) Pad IJP(c)

MJW/JD/JW/HW

ACCESSION NO: AP4048787

S/0126/04/012/004/0511/0517

34
33
B

AUTHOR: Azhashta, V. M.; Gindin, I. A.; Starobubov, Ya. D.

TITLE: Effect of stress and temperature on creep in nickel, preliminarily deformed at 4.2 K.

SOURCE: Fizika metallov i metallovecheniye, v. 18, no. 4, 1984, 511-517

TOPIC TAGS: creep, nickel, stress, temperature effect, nickel deformation, low temperature deformation

ABSTRACT: The effect of stress and temperature was investigated on creep in nickel which underwent a deformation at 4.2 K. It was found that this low temperature deformation increases the life of N-C-nickel during creep. In the investigated temperature range (4.2 to 300 K), the lifetime of nickel is an exponential function of the stress and of the inverse temperature. The tensile strength is also increasing. The activation energy of creep in nickel corresponds to the activation energy of self-diffusion. The increased resistance to creep is connected with the formation of fine-grained, disoriented substructure which resists

Card 1/2

I 43856-65

ACCESSION NR: AP1048767

intergranular slipping. Orig. art. has: 4 figures, 2 tables.

ASSOCIATION: Khar'kovskiy fiziko-tehnicheskiy Institut AN UkrSSR (Khar'kov
Physical Technical Institute, AN UkrSSR)

SUBMITTED: 01 Aug 63

ENCL: 00

SUB CODE: MM

NR REF SOV: 017

OTHER: 002

ls
Card 2/2

BOLGOV, I.S.; AZHAZHA, V.M.; AMONENKO, V.M.; ZEYDLITS, M.P.

Revealing etch figures in nickel by thermal etching in vacuum. Fiz. met. i metalloved. 18 no.4:553-557 O '64. (MIRA 18:4)

1. Khar'kovskiy fiziko-tekhnicheskii institut.

L 18288-45 EWP(m)/EWA(d)/T/EWP(t)/EWP(b) Pad IJP(e)/AFWL/SSD MJW/JL/HW

ACCESSION NR: AP5001250

S/0126/64/018/005/0796/0798

AUTHOR: Sharoval, B. I.; Azhazha, V. M.; Bolgov, I. S.; Zeydlits, M. P.

TITLE: Investigation of effect of boron on the properties of nickel by the method of internal friction B

SOURCE: Fizika metallov i metallovedeniye, v. 18, no. 5, 1964, 796-798

TOPIC TAGS: nickel, boron, nickel alloy, boron containing alloy, nickel alloy property, nickel alloy internal friction

ABSTRACT: The effect of alloying with small quantities of boron on the internal friction of nickel has been investigated. Alloys containing 0.005, 0.01, 0.05, and 0.1 wt% boron were melted from N-O grade nickel in a vacuum, high-frequency induction furnace. The curves of the temperature dependence of internal friction show three maxima at approximately 200, 430, and 630C. As established by previous studies, the first maximum is brought about by ferromagnetism of nickel and the second, by stress relaxation at the grain boundaries. The third maximum is apparently connected with the block structure of grains. In the case of pure nickel, all three maxima are rather flat. The peaks achieve maximum height at a

Card 1/2

L 18288-65

ACCESSION NR: AP5001250

boron content of 0.01%. With an increase in boron content, the level of internal friction at high temperatures decreases. In the opinion of some authors, the level of internal friction can be considered as an indirect characteristic of heat resistance, i.e., the lower the level, the higher heat resistance. This was confirmed by stress-rupture tests at 600C under a stress of 6 kg/mm², in which the alloys with 0, 0.005, 0.01, 0.05, and 0.1% boron had a rupture life of 3.5, 36, 41, 156, and 502 hr with a total elongation of 42, 55, 57, 45, and 43%.
Orig. art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 20 Nov 63

ENCL: 00

SUB CODE: MM, AS

NO REF SOV: 005

OTHER: 001

ATD PRESS: 3156

Card 2/2

L 31869-66 EWP(k)/EWT(d)/EWT(m)/EWP(h)/T/EWP(l)/EWP(e)/EWP(w)/EWP(v)/EWP(t)

ACC NR: AT6013552 ETI IJP(c) JD/HW/GD SOURCE CCDE: UR/0000/65/000/000/0063/0068

AUTHOR: Amonenko, V. M.; Azhazha, V. M.; Bolgov, I. S.; Zeydlits, M. P.; Ivanov, V. Ye.; Shapoval, B. I.

ORG: Physico-Technical Institute, AN UkrSSR (Fiziko-tehnicheskiiy institut AN UkrSSR)

TITLE: Influence of boron on the properties of nickel

66
64
B+1

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorganicheskiye soyedineniya (High temperature inorganic compounds). Kiev, Naukova dumka, 1965, 63-68

TOPIC TAGS: boron, nickel, alloy, boron alloy, internal friction

ABSTRACT: The effect of boron concentration (0-0.1 wt %) on mechanical strength limit, relative elongation, and relative plasticity of nickel was examined at 25° and 600°C and also the temperature dependence of internal friction (Q^{-1}) for nickel containing 0.005-0.1% B was examined in the 20°-60°C range. Samples of nickel-boron alloys were prepared by fusing mixtures of H-O-grade nickel and NiB standard material in an electrical furnace. After 70-80% deformation for 4 hour at 400°C, the samples were held for 2 hours at 800°C. In general, boron had a beneficial effect on the mechanical properties of nickel. Specifically, boron was found to strengthen the alloy crystals and the intergrain boundaries within the alloy, to improve the internal grain structure and

Card 1/3

L 31869-66
ACC NR: AT6013552

to retard harmful recrystallization processes. The effect of boron on strength limit, relative elongation, and relative plasticity of nickel is shown in figure 1.

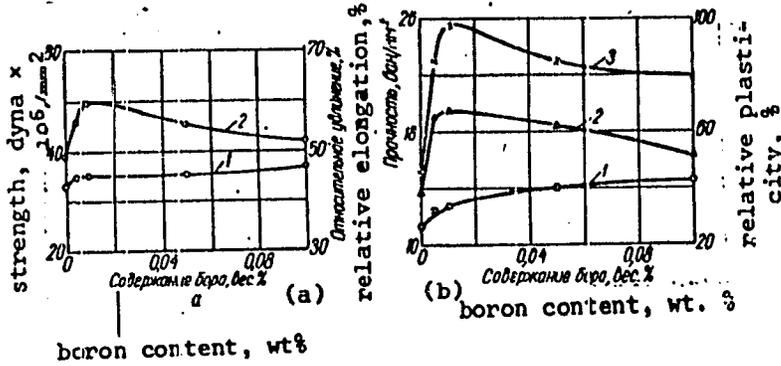


Fig. 1. The effect of boron on strength limit (1), relative elongation (2), and relative plasticity (3) of nickel at 25°C (a) and 600°C (b).

The temperature dependence of internal friction (Q^{-1}) of Ni-B alloys is given in figure 2. Orig. art. has: 5 figures.

I 31869-66

ACC NR: AT6013552

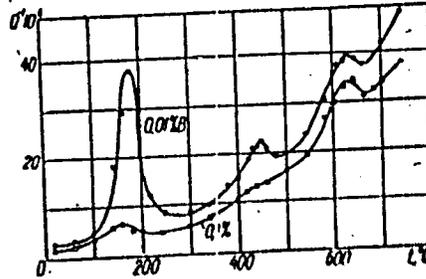
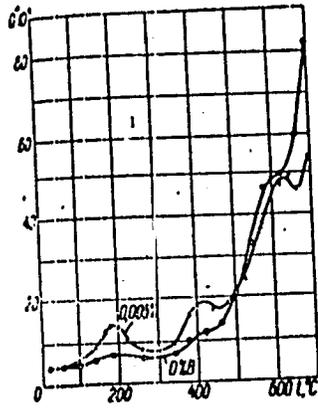


Fig. 2.

UB CODE: 11/

SUBM DATE: 03Ju165/

ORIG REF: 012/

OTH REF: 001

Card 3/3 JS

L 31370-66 SWP(k)/FWT(m)/T/BWT(o)/WAF(W)/SWP(L)/W-I LJP(c) JD/du
ACC NR: AT6013553 (N) SOURCE CODE: UR/0000/65/000/000/0069/0075

AUTHOR: Azhazha, V. M.; Amonenko, V. M.; Bolgov, I. S.; Zeydlits, M. P.; Ivanov, V. Ye.

ORG: Physico-Technical Institute AN UkrSSR (Fiziko-tekhnicheskiy institut AN UkrSSR)

TITLE: Smelting in vacuo as a means of improving the mechanical properties of boron steels

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorganicheskiye soyedineniya (High temperature inorganic compounds). Kiev, Naukova dumka, 1965, 69-75

TOPIC TAGS: boron steel, mechanical property, steel, ferrous metal, steel microstructure, chromium steel, nickel steel / EI437A steel, EI437B steel, EI403 steel

ABSTRACT: The effect of smelting (250°-1000°C) in vacuo and in air for 137-1300 hrs on relative elongation, impact, strength, and hardness of chromium-nickel steels containing from 0.4 to 3.0 wt % boron was investigated. EI437A (boron-free), EI437B (0.015 wt % B), EI403 (0.1-1.0 wt % B), and some specially prepared steels containing 2-3 wt % B were used as representative steel samples. It was found that the smelting of steels containing 2-3 wt % B results in a 1.5-2 fold increase in their plasticity. A 15-20% improvement in relative elongation characteristic and two-fold increase in impact strength result when high purity steel grades are smelted in vacuo. Greater improve-

Card 1/2

4 31070-00

ACC NR: AT6013553

ments in mechanical properties of boron-containing steels were achieved by smelting in vacuo rather than in air. The effect of smelting in vacuo on strength and plasticity of EI437B steel on rapid breaking strength and relative elongation of EI437B is graphed. The effect of boron content on mechanical properties of EI403 steel is also graphed. Orig. art. has: 6 figures, 4 tables.

SUB CODE : 11,13 SUBM DATE: 03Jul65/ ORIG REF: 006/ OTH REF: 004

Card 2/2

L 39679-65 EWT(m)/EWP(w)/EWA(j)/T/EWP(t)/EW^a(z)/EWP(b) Pad IJP(o)
ACCESSION NR: AP5008790 ASW/JE/HW S/0126/65/019/003/0439/0442

AUTHOR: Akhazha, V. N.; Gindin, I. A.; Kozinets, V. V.
Starodubov, V. V.

29
27
8

TITLE: Effect of annealing temperature on the substructure and strength of nickel deformed at 4.2K

SOURCE: Fizika metallov i matallovedeniye, v. 19, no. 3, 1965, 439-442

TOPIC TAGS: nickel, preliminary nickel deformation, nickel process annealing, nickel property, nickel creep resistance, nickel sub-structure

ABSTRACT: The effect of annealing temperature on the substructure and mechanical properties of N-0-type nickel stretched 3.5% at 4.2K has been studied. Annealing was done at 300, 500, 700, 900, or 1000K. Annealing at 300 to 700K slightly reduced the subgrain size, while annealing at 900 or 1000K increased it. The optimal annealing temperature was 500K at which a fine polygonized substructure with a large disorientation angle between the subgrain

Card 1/2

L 39679-65

ACCESSION NR: AF5008790

2

fragments and subgrains was formed. Nickel with such a substructure has the highest resistance to plastic deformation at room temperature, the longest rupture life, and the highest creep resistance. Specimens annealed at 500K showed almost no first creep stage and the creep rate in the second stage was six times lower than that of the initial metal and five times lower than that of nickel annealed at 1000K. The subgrain size was found to be practically the same with any annealing temperature, and to be considerably smaller than that of the initial metal. Orig. art. has: 3 figures. [ND]

ASSOCIATION: Fiziko-tehnicheskii institut AN UkrSSR (Physico-technical Institute, AN UkrSSR); Khar'kovskiy gosuniversitet (Khar'kov State University)

SUBMITTED: 07Jan54

ENCL: 00

SUB CODE: MM

NO REF SOV: 007

OTHER: 002

ATT PRESS: 3230

Bq2
Card 2/2

L 4075-00 EWP(e)/EWP(m)/EWP(t)/EWP(k)/EWP(z)/EWP(b) LIP(c) JD/JG
ACC NR: AP5023768 SOURCE CODE: UR/0089/65/019/003/0269/0272

AUTHOR: Akhazha, V. M.; D'yakov, I. G.; Papirov, I. I.; Tikhinskiy, G. F. 68
C

ORG: none

TITLE: Change in beryllium properties during aging 14

SOURCE: Atomnaya energiya, v. 19, no. 3, 1965, 269-272

TOPIC TAGS: beryllium, beryllium powder, beryllium property, beryllium heat treatment

ABSTRACT: The effect of aging on the mechanical properties of beryllium at elevated temperatures and the relationship between the mechanical properties and electrical resistance of aged beryllium have been studied. Hot-compacted commercial-grade (99.54%) beryllium specimens with a density of 1.844 g/cm^3 , a tensile strength of 23 and 13 to 13.5 kg/mm^2 and an elongation of 1 and 10.5% at 20 and 600C, respectively, were homogenized at 1100C for 15 min, cooled to 800C at a rate of 100C per min, to 600C at a rate of 20C per min, and to room temperature at a rate of 5C per min, and then aged at 700, 750, 800, and 850C for 4, 40, or 100 hr. It was found that aging increases the ductility of beryllium, especially at high temperatures (see Fig. 1). The tensile strength of aged specimens was 16—17 kg/mm^2 at 400C and 13—14 kg/mm^2 at 600C; it decreased to 11.4—11.8 kg/mm^2 for specimens aged at 800—850C. Yield strength for all tested specimens varied in the range 8.5—9.5 kg/mm^2 , but dropped to 7.8 kg/mm^2 after aging at 700C for 100 hr. Curves showing the dependence of elongation and elec-

Card 1/2

UDC: 546.45

L 4075-66

ACC NR: AP5023768

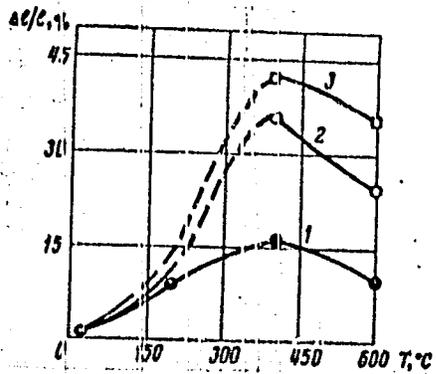


Fig. 1. Temperature dependence of beryllium (1) homogenized, (2) aged at 750C for 40 hr; and (3) aged at 700C for 100 hr.

trical resistance on aging time are similar; resistance decreases proportionally to the increase in elongation. Orig. art. has: 6 figures and 1 table. [AZ]

SUB CODE: MM, As/SUBM DATE: 25Aug64/ ORI REF: 003/ OTH REF: 000/ ATD PRESS: 4/28

BVK.
Card 2/2

AZHAZHA, V.M.; GINDIN, I.A.; KOZINETS, V.V.; STARODUBOV, Ya.D.

Effect of the annealing temperature on the substructure and strength properties of nickel prestressed at 4.2°K. Fiz. met. i metalloved. 19 no.3:439-442 Mr '65. (MIRA 18:4)

1. Fiziko-tehnicheskii institut AN UkrSSR i Khar'kovskiy gosudarstvennyy universitet.

AZHAZHA, V.V. (Morskva)

Scouts of sea depths. Priroda 51 no.6:112-113 Je '62. (MIRA 15:6)
(Oceanographic research)

AZHAZHA, W.

Reforged sword, Nauka i zhizn' 28 no.11:80-81 N '61.

(MIRA 14:12)

1. Zanesitel' predsedatelya byuro Sektsii podvodnykh issledovaniy
Okeanograficheskoy komissii AN SSSR, uchastnik ekspeditsiy na
"Severyanke".

(Oceanographic research)

IVANOV, Ye.K.; ASHEGANOV, L.P.; LOPATIK, V.G.; FREGER, D.P., tekhn.red.

[Experience in mobilizing internal production resources in the
Kalinin Distric of the city of Leningrad] Opyt mobilizatsii
vnutrennikh rezervov proizvodstva v Kalininskom raione
g. Leningrada. Leningrad, 1955. 54 p. (Leningradskii dom nauchno-
tekhnicheskoi propagandy. Informatsionno-tekhnicheskii listok,
nos.60(748)/61(749)/62(750)) (MIRA 10:12)
(Technical education)

USSR / General and Specialized Zoology. Insects.

F

Abs Jour: Ref Zhur-Biol., No 2, 1958, 6784.

Abstract: itus, *S. lineatus*, *S. tibialis*, *S. lineatus*) and *Phytonomus transsylvanicus* were the most important pests. The lucerne was first inhabited by *S. crinitus* and *S. lineatus*, which formed the basic mass of the weevils. The *phytonomus* bred a lot, all the seeds were lost in 1953 due to the destruction of the buds. The most important pests of lucerne were the following bugs: *Plagiognathus chrysanthemii*, *Lygus pratensis*, *Adelphocoris lineolatus* and *Ad. quadripunctatus*, which increased the falling of the buds (in gauze insulators) by 15-26%. The insects damaged the lucerne during all the vegetation period and especially during budding and flowering. -- A. P. Adrianov.

Card 2/2

14

AZEROV, M. S.

The laboring class and technological progress in the process of
the building of communism. Vest. AN Kazakh. SSR. 19 no.5:17-24
My '69. (MIRA 17:7)

AZHERMACHEV, G.A., insh.

Girders with undulate walls. Prom. stroi. 40 [1ke. 41] no.4:
54-56 Ap '63. (MIRA 16:3)
(Beams and girders--Testing)

L 11387-67

ACC NR: AT6036511

The subjects were at rest in some experiments and performed physical work of medium difficulty in others.

It was found that during prolonged resting exposure to high altitudes moisture loss increases by 1.5 to 2 times (from 40-50g/hr to 70-120g/hr). This increase is due to increased evaporation from the skin in a rarefied atmosphere. Increased perspiration due to emotional tension was also sometimes seen.

Step test exercises caused still greater water loss (120 to 225 g/hr). Increased moisture loss at high altitudes was primarily due to the wearing of altitude equipment which hindered movement, as well as to rarefied atmosphere and emotional tension.

Skin temperature dynamics confirmed the intensification of evaporation from the body and underclothing at high altitudes. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2 eigk

AZHOLKHIN, I.S.

Use of Kaminski's device for the determination of the solidity
of suppository bases. Apt. delo 14 no.1:14-19 Ja-F '65.

(MIRA 18:10)
I. I Moskovskiy ordena Lenina meditsinskiy institut imeni
Sechenova.

AZHGIKHIN, I.P.; SAL'NIKOV, Ye.T.

Use of radioactive phosphorus (P^{32}) for determining the absorption rate from suppository bases. Apt.delo 14 no.2117-21 Mr. Ap '65.

(MIRA 1961)

1. Pervyi Moskovskiy ordena Lenina meditsinskiy institut imeni I.M. Sechenova i Tsentral'nyy nauchno-issledovatel'skiy kozhno-venereologicheskiy institut. Submitted June 12, 1965.

SAL'NIKOV, B.A.; GROMOVA, N.S.; SHTEMPEL", B.M.; AZHGIREVICH, L.F.;
SAL'NIKOVA, L.L.; SINITSYN, V.M., doktor geolog.-mineral.nauk,
otv.red.; MORACHEVSKIY, D.Ye., red.izd-va; KUZNETSOV, G.V.,
red.izd-va; ZENDEL', M.Ye., tekhn.red.

[History of Paleogene coal accumulation in Sakhalin] Istoriiia
paleogenovogo ughenakopleniia na territorii Sakhalina.
Moskva, Izd-vo Akad. nauk SSSR, 1963. 167 p. 22 plates.
(Akademiia nauk SSSR. Laboratoriia geologii ughia. Trudy,
no.17).

(Sakhalin--Coal geology)

(MIRA 16:2)

AZHGYREY, D.G.

Geological and genetic characteristics and prospects for iron
mineralization in the Khamir Bol'obaya Rechka region in the
Altai. Trudy Alt.GMNIT AN Kazakh.SCR 16:141-148 '63.

(SURA 17:10)

AZHIGIREY, D.S.; DUBININ, A.P.; KOROCOV, V.V.

New data on the Lower Carboniferous stratigraphy of the Zymyansk region in the Altai. Izv. vys. ucheb. zav.; geol. i razv. 6 no.5:3-11 My '65. (MIRA 18:10)

1. Ust'-Kamenogorskiy gornometallurgicheskiy institut.

AZHGIREY, G. D.

"Tectonics and Main Stages of Structure Formation of the Central Caucasus."
Thesis for degree of Dr. Geological Mineralogical Sci. Sub 13 May 49, Inst of
Geological Sciences, Acad Sci USSR.

Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and
Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

SO: MLRA

AZHIREY, G.D.

Plastic deformation of the ancient crystalline foundation during
the alpine folding of Central Caucasus. *Biul. MOIP. Otd. geol.* 26
no.4:60-73 '51. (MIRA 11:5)
(Caucasus---Geology, Structural)

AZHGIREY, G. D.

DSSR/Geophysics - Geotectonics Mar/Apr 52

"Concerning the Main Geotectonic Conclusions of V. V. Belousov and V. Ye. Khain," G. D. Azhgirey

"Iz Ak Nauk SSSR, Ser Geol" No 2, pp 142-146

A critic discussion of the articles "Problem of the Earth's Internal Structure and Its Development" (by Belousov) and "Basic Laws of the Development of Geo-synclinals" (by Khain), appearing in "Iz Ak Nauk SSSR, Ser Geol" No 1, 1951, and "Iz Ak Nauk SSSR, Ser Geol," No 6, 1948, resp; also Khain's "Main Stages in the Geotectonic Development of the Caucasus," appearing in "Byul Mosk Obshch Ispytat Prirody, Otdel Geolog" No 3 213783

and 4, 1950. Points out the deficiencies in the mentioned works, especially the unreliability of the procedure followed in their geotectonic investigations; indicates contradictions in their theories of radial tectonic forces and movements.

213783

AZHUREY, G. D.

USSR/Geophysics - Irtysh Zone

May/June 52

"Principal Problems in the Study of the Geology of the Irtysh Zone of Warping," G. D. Azhurey, P. F. Ivankin

"Byul Mosk Obshch Ispytat Prirody, Otdel Geol" Vol 27, No 3, pp 27-47

Authors state that the Irtysh zone of warping is the largest tectonic structure of southwest Altay. Until recently, they note, geologists studying the Altay disagreed as to the structure and genesis of this most interesting formation. This article, based on the personal observations

229T77

of the authors, represents the 1st attempts at a general characterization of the geology of the Irtysh zone of warping. The practical aim of the article is a discussion of ways for further study of the zone.

229T77

AZHGIREY, G.D.

Problems discussed on the history of tectonic formations of the Caucasus during the Mesozoic and Cenozoic (author's summary). *Biul.MOIP.Otd.geol.* (MLRA 6:9) 28 no.4:97-98 '53.
(Caucasus--Geology, Structural) (Geology, Structural--Caucasus)

AZHGIREV, G.D. redaktor; BRESHENKOV, B.K., redaktor; PROKOF'YEV, A.P.,
redaktor; RUSINOV, L.A., redaktor; KRASNOVA, N.E., redaktor;
(GOFDIYENKO, Ye.B., tekhnicheskii redaktor

[Methods of exploration and prospecting for minerals] Metody poiskov
i razvedki poleznykh iskopaemykh. Izd. 2-e, perer. Moskva, Gos.
nauchno-tekhn. izd-vo lit-ry po geol. i okhrane neдр, 1954. 462 p.
(Prospecting) (MIRA 8:4)

AZHGIREY, G.D.

Different types of tectonic movements. Biol. MOIP. Otd. geol.
29 no. 5: 87-89 S-0 '54. (MIRA 8:1)
(Earth movements)

AZHOIREY, G.D.

Genetic classification of folding. *Bull.MOIP.Otd.geol.* 39 no.2:
91 Nr-Ap '54. (MIRA 7:7)
(Folds (Geology))

AZHIGIREY, Gleb Dmitriyevich; PERMYAKOVA, A.I., redaktor; MULIN, Ye.V.,
tekhnicheskiy redaktor.

[Structural geology] Strukturnaia geologiya. [Moskva] Izd-vo
Moskovskogo univ., 1956. 492 p. (MIRA 9:11)
(Geology, Structural)

AZHGIREY, G. D. and BELOUSOV, V. V.

"On the Study of the Mechanism of the Formation of Large Structural Elements
of the Earth's Crust.

paper presented at the First All-Union Conference on Tectonophysics, Moscow,
29 Jan - 5 Feb 1957.

G. D. AZHGIREY - Moscow State Univ.

Sum 1563

GALDIN, N.Ye. [translator]; AZHGIREY, G.D., red.; POPOV, G.M., dotsent,
red.; ROMANOVICH, G.P., red.; ~~SONOLOVA, T.V., tekhn.red.;~~
IOVLEVA, N.A., tekhn.red.

[Problems in structural geology] Voprosy strukturalnoi geologii.
Pod red. i s predisl. G.D. Ashgireia. Moskva, Izd-vo inostr.
lit-ry, 1958. 260 p. (MIRA 12:8)
(Geology, Structural)

AZHGIREY, G.D.

Age of folds in the northern tectonic zones of central Kazakhstan.
Nauch.dokl.vys.shkoly; geol.-geog.nauki no.1:201-207 '58.

1. Moskovskiy universitet, geologicheskiy fakul'tet, Kavkazskaya
ekspeditsiya. (MIRA 12:2)

(Kazakhstan--Folds (Geology))

AZHIGIYEV, G.D.

Prospecting for hidden lead-zinc deposits in Northern Ossetia.
Izv. vys. ucheb. zav.; geol. i razv. 1 no.4:73-83 Ap '58.

(MIRA 11:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Ossetia--Zinc ores) (Ossetia--Lead ores)

72HGIREV. G.D.

1972-1973

Department of Geology of the Georgian SSR (USSR)

Date	Topic	Speaker
1977	Geology of the Caucasus	G.A. Vakhrameev
1978	Geology of the Caucasus	G.A. Vakhrameev
1979	Geology of the Caucasus	G.A. Vakhrameev
1980	Geology of the Caucasus	G.A. Vakhrameev
1981	Geology of the Caucasus	G.A. Vakhrameev
1982	Geology of the Caucasus	G.A. Vakhrameev
1983	Geology of the Caucasus	G.A. Vakhrameev
1984	Geology of the Caucasus	G.A. Vakhrameev
1985	Geology of the Caucasus	G.A. Vakhrameev
1986	Geology of the Caucasus	G.A. Vakhrameev
1987	Geology of the Caucasus	G.A. Vakhrameev
1988	Geology of the Caucasus	G.A. Vakhrameev
1989	Geology of the Caucasus	G.A. Vakhrameev
1990	Geology of the Caucasus	G.A. Vakhrameev
1991	Geology of the Caucasus	G.A. Vakhrameev
1992	Geology of the Caucasus	G.A. Vakhrameev
1993	Geology of the Caucasus	G.A. Vakhrameev
1994	Geology of the Caucasus	G.A. Vakhrameev
1995	Geology of the Caucasus	G.A. Vakhrameev
1996	Geology of the Caucasus	G.A. Vakhrameev
1997	Geology of the Caucasus	G.A. Vakhrameev
1998	Geology of the Caucasus	G.A. Vakhrameev

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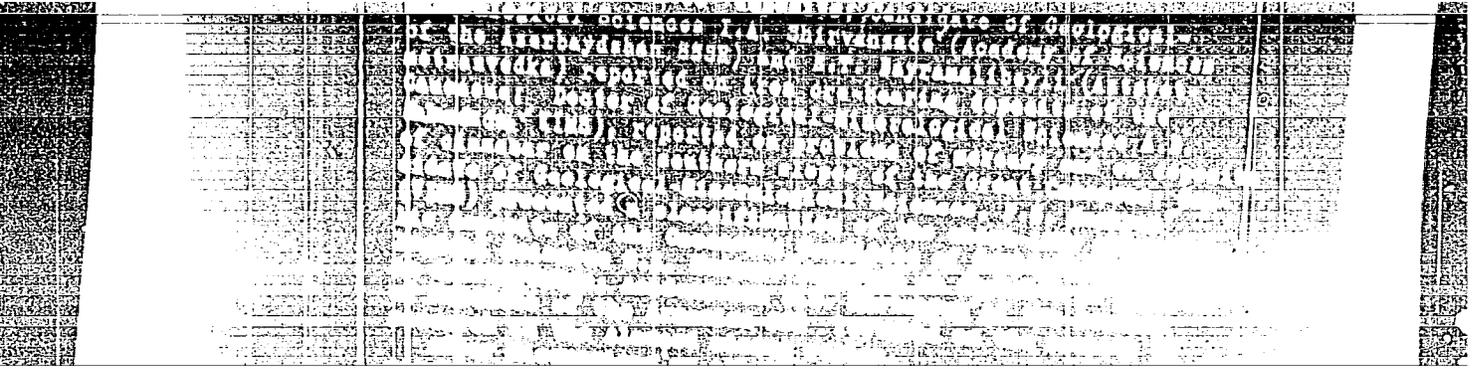
Metallurgy of the Caucasus

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"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000102720013-5

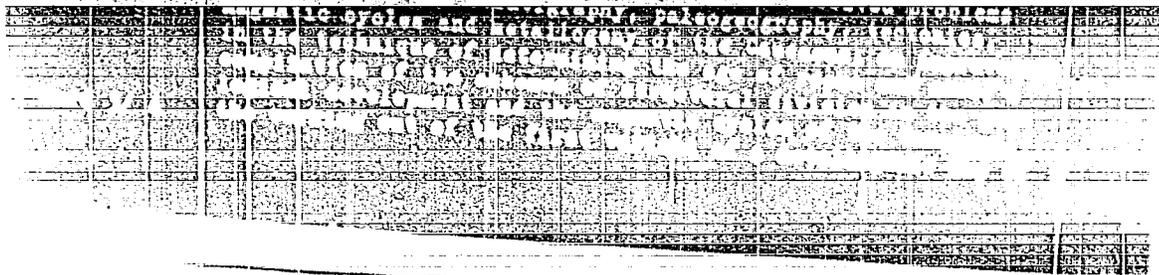


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AZHGIREY, G.D., prof., otv.red.; SLAVIN, V.I., prof., red.; SMIRNOV, V.I.,
prof., red.; KHAIN, V.Ye., prof., red.; DRUSHCHITS, V.V., dotsent,
red.; GAYDASH, Ya.F., tekhn.red.

[Materials on the geology and metallogeny of the central and
western Caucasus; transactions] Materialy po geologii i metallo-
genii Tsentral'nogo i Zapadnogo Kavkaza; trudy. Stavropol',
Stavropol'skoe knizhnoe izd-vo. Vol.2. 1960. 226 p.

(MIRA 14:3)

1. Kavkazskaya ekspeditsiya VAGT i Moskovskogo gosudarstvennogo
universiteta. 1957.

(Caucasus--Geology)

KREYTEH, Vladimir Mikhaylovich. Prinimal uchastiye DYUKOV, A.I.
— AZHGIREY, G.D., nauchnyy red.; ENTIN, M.L., red.izd-va;
GUROVA, O.A., tekhn.red.

[Prospecting for mineral deposits] Poiski i razvedka mesto-
rozhdenii poleznykh iskopaemykh. Izd.2.; polnost'iu pererabo-
tannoe. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane
nedr. Pt.1. 1960. 331 p. (MIRA 13:12)
(Prospecting) (Ore deposits)

AZHGIRIY, G.D.

Valuable summary on the geology of the Altai. Sov. geol. 3
no. 9:159-161 S '60. (MIRA 13:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Altai Mountains--Geology)

AZHGINY; G.D.

Geological studies of the western Caucasus in connection with
its metallogy. Trudy VAGT no.6:5-13 '60. (MIRA 14:3)
(Caucasus---Geology, Economic)

S/O11/60/000/008/001/003
AO54/A133

AUTHOR: Azhgirey, G.D.

TITLE: On some important regulations relating to the tectonic structure and movement of the Earth's crust

PERIODICAL: Izvestiya Akademii Nauk SSSR. Seriya geologicheskaya, no.8, 1960, 3 - 19

TEXT: A new method of geotectonic investigation, which the author calls "regional structural analysis" is expounded. It is assumed that this will supply geologists investigating problems of structural geology and geotectonics, and also research workers surveying useful minerals, with fresh views on the principal laws of morphogenesis and the development of folded zones. Conclusions are drawn and new meanings are attached to well-known conceptions on the basis of theoretical studies and investigations, carried out partly by the author, mainly in the Crimea and the Caucasus (from the Taman Peninsula to Shak-Dag), which form a folded arc, its convexity oriented towards the Russian platform in the Southern and Central Urals and folded arcs and plutonic fractures in Asia. The concurrence of the laws governing the trend of stepped foldings in the contemporary

Card 1/5

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On some important regulations ...

S/O11/60/000/008/001/003
A054/A133

oceanic arcs and the corresponding features of the development of island arc structures and intercontinental arcs of mobile belts indicates that the dynamics and kinematics of tectonic movements in all arcs are uniform. With regard to fractures, which are important elements of mobile belts, a distinction should be made between plutonic fractures which preserve their activity throughout the entire period of geological development of the Earth and those whose activity considerably decreases, while new plutonic fractures form in the mobile belts, for instance the Palaeozoic Tyrnyauz-Pshekishsk fracture and the main range of the Great Caucasus). The term "plutonic fracture" requires a more precise definition. According to the author this term applies to primary fracture which are actually the axial structures of principal folded structures united in clearly defined arcs. One of the most characteristic features of plutonic fractures is the longitudinal slipping element of fault, regularly following the law that displacement due to shift to the right invariably takes place in the right wing of the arc (Great Caucasus), while the trend to shift to the left is found in the left wing of the arc (Crimea). Arcs in general are not connected with each other by the contact of their inverted peaks but usually intersect nearly at right angles. The places where arcs contact each other or intersect show increased magmatism, a concentration of intrusive formations and are consequently important for surveying metal

Card 2/5